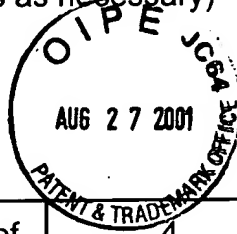


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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	09/830,026	
			Filing Date	April 20, 2001	
			Confirmation Number		
			First Named Inventor	Picking, et al	
			Group Art Unit	1645	
			Examiner Name		
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
SD	1	5,935,824	435/69.7	Sgarlato	08-10-1999
	2	5,747,024	424/85.2	Grabstein, et al.	05-05-1998
	3	5,723,127	424/184.1	Scott, et al.	03-03-1998
	4	5,594,115	530/413	Sharma	01-14-1997
	5	5,436,393	800/205	Rocha-Sosa, et al.	07-25-1995
	6	5,182,109	424/92	Tamura, et al.	01-26-1993
	7	5,041,372	435/6	Lampel, et al.	08-20-1991
	8	4,816,389	435/6	Sansonetti, et al.	03-28-1989
	9	4,683,202	435/91	Mullis	07-28-1987
	10	4,683,195	435/6	Mullis, et al.	07-28-1987
SD	11	4,554,101	260/112.5	Hopp	11-19-1985

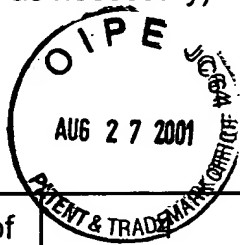
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OTHER ART - NON PATENT LITERATURE DOCUMENTS				
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SD	12	ARAKAWA, ET AL., Expression of Cholera toxin B subunit oligomers in transgenic potato plants, Transgenic Research, 1997, 6:403-413, Chapman & Hall, London		
	13	DE GEYTER, ET AL., Purification of IpaC, a protein involved in entry of Shigella flexneri into epithelial cells and characterization of its interaction with lipid membranes, FEBS Letters, 1997, 400:149-154, Federation of European Biochemical Societies		
	14	CZERKINSKY, ET AL., Cholera Toxin B. Subunit as Transmucosal Carrier-Delivery and Immunomodulating System for Induction of Antiinfectious and Antipathological Immunity, Annals New York Academy of Sciences, 1996, 778:185-193		
	15	CORTHESEY, ET AL., A Pathogen-specific Epitope Inserted into Recombinant Secretory Immunoglobulin A is Immunogenic by the Oral Route, The Journal of Biological Chemistry, 1996, 271:33670-33677, The American Society for Biochemistry and Molecular Biology, Inc., U.S.A.		
	16	PICKING, ET AL., Cloning, Expression, and Affinity Purification of Recombinant Shigella flexneri Invasion Plasmid Antigens IpaB and IpaC, Protein Expression and Purification 1996, 8:401-408; Academic Press, Inc.		
	17	BARZU, ET AL., Induction of a Local Anti-IpaC Antibody Response in Mice by Use of a Shigella flexneri 2a Vaccine Candidate: Implications for Use of IpaC as a Protein Carrier, Infection and Immunity, Apr. 1996, 64:1190-1196, American Society for Microbiology		
SD	18	MARQUART, ET AL., Soluble Invasion Plasmid Antigen C (IpaC) from Shigella flexneri Elicits Epithelial Cell Responses Related to Pathogen Invasion, Infection and Immunity, Oct. 1996, 64:4182-4187, American Society for Microbiology		

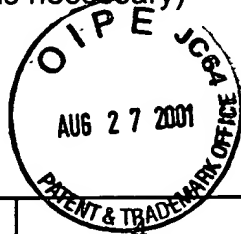
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SD	19	KANIGA, ET AL., Homologs of the <i>Shigella</i> IpaB and IpaC Invasins Are Required for <i>Salmonell typhimurium</i> Entry into Cultured Epithelial Cells, Journal of Bacteriology, July 1995, 177:3965-3971, American Society for Microbiology	
	20	TURBYFILL, ET AL., Recognition of three Epitopic Regions on Invasion Plasmid Antigen C by Immune Sera of Rhesus Monkeys Infected with <i>Shigella flexnei</i> 2a, Infection and Immunity, Oct. 1995, 63:3927-3935, American Society for Microbiology	
	21	KANIGA, ET AL., Identification of Two Targets of the Type III Protein Secretion System Encoded by the <i>inv</i> and <i>spa</i> Loci of <i>Salmonella typhimurium</i> That Have Homology to the <i>Shigella</i> IpaD and IpaA Proteins, Journal of Bacteriology, Dec. 1995, 177:7078-7085, American Society for Microbiology	
	22	MARINARO, ET AL., Mucosal Adjuvant Effect of Cholera Toxin in Mice Results form Induction of T Helper 2 (Th2) Cells and IL-4 ¹ , The Journal of Immunology, 1995, 155:4621-4629, The American Association of Immunologists	
	23	KOTLOFF, ET AL., Evaluation of the safety, immunogenicity, and efficacy in healthy adults of four doses of live oral hybrid <i>Escherichia coli</i> - <i>Shigella flexneri</i> 2a vaccine strain EcSf2a-2; Butterworth Heinemann, 1995, 13:495-502, Elsevier Science, Ltd., Great Britain	
	24	VENKATESAN, ET AL., Nucleotide sequence of invasion plasmid antigen gene <i>ipaA</i> from <i>Shigella flexneri</i> 5, Nucleic Acids Research, 1989, 18:6,	
	25	VENKATESAN, ET AL., Characterization of invasion plasmid antigen genes (<i>ipaBCD</i>) from <i>Shigella flexneri</i> , Microbiology, 1988, 85:9317-9321, Proc. Natl. Acad. Sci, U.S.A.	
	26	OAKS, ET AL., Serum Immune Response to <i>Shigella</i> Protein Antigens in Rhesus Monkeys and Humans Infected with <i>Shigella</i> spp., Infection and Immunity, July 1986, 53:57-63, American Society for Microbiology	
	27	BUYSSE, ET AL., Molecular Cloning of Invasion Plasmid Antigen (<i>ipa</i>) Genes from <i>Shigella flexneri</i> : Analysis of <i>ipa</i> Gene Products and Genetic Mapping, Journal of Bacteriology, June 1987, 169:2561-2569, American Society for Microbiology	
SD	28	MAURELLI, ET AL., Cloning of Plasmid DNA Sequences Involved in Invasion of HeLa Cells by <i>Shigella flexneri</i> , Infection and Immunity, July 1985, 49:164-171, American Society for Microbiology	

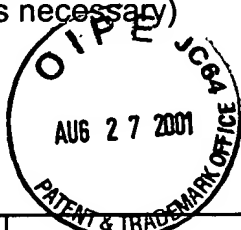
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SD	29	SASAKAWA, ET AL., Virulence-Associated Genetic Regions Comprising 31 Kilobases of the 230-Kilobase Plasmid in <i>Shigella flexneri</i> 2a, Journal of Bacteriology, June 1988, 170:2480-2484, American Society for Microbiology	
	30	KYET, ET AL., A Simple Method for Displaying the Hydropathic Character of a Protein, Journal of Molecular Biology, May 1982, 157:105-132, Academic Press, Inc., London	
SD	31	U. K. LAEMMLI, Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4, Nature, 1970, 227:680-685, MRC Laboratory of Molecular Biology, Cambridge	

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